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REMARKS

Claims 1, 3- 13, as presented for examination following amendment in response to a first Office Action were rejected by Final Office Action mailed November 9, 2007. Claims 14 and 15 stand withdrawn.

Claims 14 and 15 are canceled by this Amendment. Certain amending language is presented to correct matters of antecedent basis and provide that improvement of clarity to place the claims in better form for Appeal.

Claim rejections per 35 U.S.C. §103(a)

The Examiner cites Baba, et al, of record, for in combination with Saito in rejecting claim 1. As here amended, the limitations of claim 1, are amended to more clearly align the subject matter of claim 1 with Baba, et al, by specific structure for introduction and removal of the fluid flow into and out of the optical path which is *coaxial* with the fluid flow path. That is, the gallery structure of gaskets between the intermediate body member and the respective body members serves not only the sealing function, but also provides the means for introducing the fluid flow along the optical path to produce this coaxial disposition. The Examiner has commented that the preamble of claim 1 does not present limiting matter and Applicant agrees, with the further recognition that the preamble does not present the clear context that sets out the nature of the apparatus. The amendment presents the structural limitation shared by the present apparatus with the Baba reference. The amending language of claim 1 presented above places the galleries (150, 152) adjacent the respective ends of the hole 118 and these recited components comprise "*a portion of the flow through passage*". See p. 7, lines 20-21. Next consider that further amending language is added to the last subparagraph:

"a said portion of the flow through passage through which liquid flows into or out of a said region substantially immediately adjacent the optically transparent window and initially transversely of the direction of the hole."

This establishes that the particular portion of the flow path (with galleries 150,152) is immediately adjacent the optical windows. Fluid flow is *introduced and removed* transversely of the axis of the hole 118, but such flow is directed along the axis of the hole. That is, the fluid

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flows into or out of a said region immediately adjacent the optically transparent window and transversely of the direction of the hole (e.g., the axis of the hole), but the optical axis coincides with "said part of the flow through passage". (Please see page 8, lines 5-20 of the specification.

Entry of the amendments is specifically requested to provide that specific context (coincidence of optical path and fluid flow path) for the claimed apparatus to reduce issues on appeal and to provide that structural limitation which has been lacking in the preamble.

The Examiner admits that Baba does not disclose

"a resilient sealing gasket located between facing surfaces of the intermediate body members wherein each gasket includes a gallery which provides said portion of the flow through passage." Examiner's Action, page 5.

The Saito reference does not supply the element which remains wanting. Saito discloses apparatus comprising a fluorescence flow cell. Optical excitation, fluorescence emission are provided/observed with optical paths that are *mutually orthogonal* with the fluid flow path. This distinction was discussed by Applicant in his most recent response. There is no analogy to the present work (or that of Baba) because there is no coincidence of the linear optical path (source and detector disposed at the ends thereof) with the fluid flow path. One does not perform the kind of physical measurement (optical absorbance) in the fluorescence excitation apparatus of Saito.

It must be concluded that the Examiner fails to consider the relative orientation of the flow path with the optical path. The claim limitation

"wherein a part of the flow through passage comprises a hole through the intermediate body member together with a liquid inlet region at one end of the hole and a liquid outlet region at the other end of the hole"

establishes the fluid passage way through hole 118. The further limitation

"wherein the two other body members are each associated with an optically transparent window aligned with a respective end of the hole through the intermediate body member thereby providing an optical pathway through said part of the flow through passage,"

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establishes the orientation of the optical pathway with respect to the flow through passage.

Finally the resilient member of the present work has structure and function beyond the simple sealing function of Saito, as stated by the limitation

“wherein each gasket includes a gallery which provides said portion of the flow through passage,”

“Gallery” is defined at p. 3, lines 10-14 and there is no disclosure in the Saito reference that would supply a structural similarity to the galleried resilient members disclosed and claimed in the present work. In his discussion of claim 3, the Examiner asserts that Saito presents galleries represented by 34a and 34b in an inlet gasket 112 of figure 6. Assuming the Examiner has meant holes 134a and 134b in flow regulating portion 122, it remains to observe that the orientation of optical path and fluid flow path are orthogonal in Saito and the asserted galleries of Saito do not communicate at all with the optical path of the flow cell portion of Saito. When the Examiner suggests achieving his combination through substitution of the flow cell of Baba with the apparatus of Saito, there remains the incompatibility of these apparatuses.

The analysis of the Examiner’s combination is best summarized with the observation that fluid flow in the Saito reference is orthogonal to the optical path, whereas fluid flow in the Baba reference is along the optical path. The design engineering of the two arrangements (apart from the substantive difference between the types of instrumental observations) is quite distinct and the references do not support the combination asserted by the Examiner. Even if the Saito reference is relied upon for the proposition that gaskets are known for use in sealing the composite body together, a major role of the gaskets in the present work (to provide a means for introducing fluid flow along the optical path) have no suggestion or counterpart in Saito or Baba. Note for the present work that the communication of the galleries 150 and 152 with the holes 156 and 160, in turn communicating with fluid path 118 and that these galleries are adjacent the optical windows. This is emphasized by the present amendment. There is no equivalent structure in Saito because that reference places the optical path and fluid flow path in a perpendicular relationship. Accordingly, the combination should be withdrawn.

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CONCLUSION

Amendment to the claims has been proposed to add clarity to claim 1 upon which the other claims depend. Favorable reconsideration of the Final Office Action in view of the above presented Amendments and Remarks is respectfully requested.

Respectfully submitted,



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